4th European

ORGANIC CHEMISTRY CONGRESS

March 01-03, 2018 | London, UK

Use of natural peloids of Georgia for cosmeceutical purposes

Nana Devdariani and David Jincharadze Georgian Technical University, Georgia

Background: Medicinal muds (peloids) are being used for centuries for the prevention and soft treatment of various diseases; they are ecologically pure, cheap and easy to apply. Due to their chemical and biological mixture, peloids can eliminate pathogenic bacteria and inflammatory processes without damaging surrounding microflora.

The Purpose of this Study: Use of natural resources of Georgia-peloids for cosmeceutical purposes. Many new competitive cosmetic and pharmaceutical products (facial and body creams, masks, compresses, diapers, shampoos, tooth pastes, ointments) can be researched based on natural peloids of Georgia. For this purpose, we have selected pseudovolcanic dry muds from Dedoplistskaro region of Georgia: "Takhti Tepa" and "Kila Kupra". The study of their chemical composition and physical-chemical properties was performed, as well as aspects of separation and quantitative determination of biologically active organic compounds (BAOC).

Methodology: For separation and quantitative determination of BAOC, their preliminary extraction and gravimetric method of analysis were used. For extraction of liophilic compounds from dry mud following solvents were used: chloroform, pentane, methylene chloride and acetone.

Findings: Performed experiments show that higher separation rate of BAOC from naturally dry peloids is achieved by use of coherent extraction by two extragents with different polarity. The optimal time of each extraction was 15 min, with10-15min intervals. Quantitative results were obtained by gravimetric method of analysis.

Conclusion: The use of dry mud treatment increases the potential of peloidotherapy in Georgia which gives the possibility of use peloids as brackets, granules, massage creams for carrying out the procedures at home conditions.

Recent Publications

- 1. N Devdariani, D Jincharadze (2017) Methods of separation of organic substances from naturally "dry" peloids of Georgia. 23rd International Symposium on Separation Sciences 210.
- 2. N Bokuchava, N Devdariani, L Ebanoidze and D Jincharadze (2016) Development of optimal method for extraction of organic substances from medicinal "dry" clays of Georgia. Journal of the Georgian Ceramists Association 5.
- 3. N Bokuchava, D Jincharadze, L Ebanoidze and N Devdariani (2017) Cosmetics, Cosmetology Georgian Technical University 182.
- 4. N Devdariani, D. Jincharadze Antibacterial activity of volcanical and slit peloids of Georgia, Georgian Engineering News #2 (2017)
- 5. N Bokuchava and M Mikaia N. Spiranti Antibacterial properties and physiological groups of microorganisms in peloids of Georgia. News of dermatology and venereology of South Caucasus (2005) p 60-62.

Biography

Nana Devdariani is a PhD student, working on Georgian mud (peloids). Together with the Georgian Technical University team she makes natural cosmetic products. She researches physical and chemical properties of Georgian mud.

nana.devdariani.1@iliauni.edu.ge